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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/700,857	11/04/2003	Young H. Kim	CL2207USNA	6319
43693 7590 07/22/2009 INVISTA NORTH AMERICA S.A.R.L. THREE LITTLE FALLS CENTRE/1052 2801 CENTERVILLE ROAD WILMINGTON, DE 19808				
EXAMINER				
TRAN, THAO T				
ART UNIT		PAPER NUMBER		
1794				
NOTIFICATION DATE		DELIVERY MODE		
07/22/2009		ELECTRONIC		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

Kathy.L.Crew@invista.com
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Office Action Summary

Application No.

10/700,857

Applicant(s)

KIM ET AL.

Examiner

Thao T. Tran

Art Unit

1794

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 March 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-29 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-29 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SI/02)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

1. This is in response to the Reply filed on 3/30/2009.
2. Claims 1-29 are currently pending in this application. No change in the claims has been made by this Reply.
3. Upon further consideration, the previous rejection of the claims has been withdrawn. A new rejection is set forth below.

Double Patenting

4. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the “right to exclude” granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

5. Claims 1-29 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-4, 6-8 of copending Application No. 10/701,317. Although the conflicting claims are not identical, they are not patentably distinct

from each other because the scope of the claims of the copending Application overlaps that of the instant claims, rendering them obvious over each other.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1-8, 10-12, 14-18, 20-22, 24-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Anand et al. (US Pat. 5,037,864).

Anand discloses polyurethane aqueous dispersions, wherein the polyurethane is produced from the reaction of diisocyanates, polyols, an ionic group-containing reactant, and chain extenders. The diisocyanates include toluylene diisocyanate. The polyols include copolymers of tetrahydrofuran and ethylene oxide or propylene oxide. The chain extenders include water. (See abstract; col. 7, ln. 38-66; col. 8, ln. 1-6, 23-24, 29-32; paragraph bridging col. 8-9; col. 11, ln. 13-34; paragraph bridging col. 12-13; col. 13, ln. 59-61; col. 14, ln. 1-14).

Anand further teaches the polyols having a molecular weight of about 1,000 to about 3,000 (see col. 8, ln. 3).

Although Anand does not specifically disclose the urea group content in the polyurethane, it has been known within the skill in the art that the amount of water used would

determine the amount of the urea groups. Therefore, it would have been obvious to one of ordinary skill in the art that the amount of the urea groups would have been realized by adjusting the amount of water.

8. Claims 20-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bialke et al. (US Pat. 6,794,475).

Bialke discloses an aqueous polyurethane-urea dispersion (PUD) used in making gloves, films, or sheets (see abstract; col. 1, ln. 6-9; col. 10, ln. 8-10), the PUD dispersion comprising polymerized units of diisocyanate and hydrophilic moiety, and of polyols. The diisocyanates include toluene diisocyanate. The polyols include polyesters, such as polyester of adipic acid and ethylene glycol (see col. 8, ln. 39-59). The hydrophilic moiety is dimethylol propionic acid (see col. 9, ln. 20-21). Note that the propionic acid is to provide the hydrophilic moiety into the PUD to stabilize the dispersion in water, thus it is a surfactant. Moreover, Bialke teaches the use of surfactants in the dispersion (see col. 9, ln. 67).

The reference further discloses that the PUD comprises diol, diamine, or both (see col. 8, ln. 42-44), indicating that diamine may not be used.

Bialke does not teach a specific amount of urea units to be less than about 2 mole %. However, it has been known in the art that the amount of the urea units would have been dependent on the amount of water used. Therefore, it would have been obvious to one of ordinary skill in the art that the amount of the urea units would have been achieved by adjusting the amount of the water used in order to obtain the desired results.

Bialke teaches the use of dimethylolpropionic acid, and not 2,2-dimethanolpropionic acid. However, it would have been obvious to one of ordinary skill in the art that substituting one

acid for another would have been given the same effects because these two propionic acids have been used as alternatives of each other in the art.

9. Claims 9, 13, 19, 23, and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Anand et al. as applied to claims 1-8 and 10-26 above and further in view of Bialke or Berger et al. (US Pat. 3,178,310). The Berger reference is cited in the IDS of 4/26/2004.

Anand is as set forth in claims 1-8 and 10-26 above and incorporated herein.

Anand does not teach the use of a surfactant in the polyurethane dispersion.

Bialke and Berger each teach a polyurethane dispersion composition comprising a surfactant in the polyurethane dispersion. Bialke further teaches the use of dimethylolpropionic acid.

Therefore, it would have been obvious to one of ordinary skill in the art to have employed surfactants or emulsifying agents, as taught by Bialke or Berger, and dimethylolpropionic acid, as taught by Bialke, to promote polyurethane dispersions of Anand for their art recognized purpose and function.

Response to Arguments

10. Applicant's arguments with respect to claims have been considered but are moot in view of the new ground(s) of rejection.

Note that Bialke teaches diols, diamines, or both may be included in the PUD, indicating that the PUD composition may not include diamines. In this case, water would determine the amount of the urea groups in the polyurethane. Thus, Bialke is obvious over the presently claimed invention.

Contact Information

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thao T. Tran whose telephone number is 571-272-1080. The examiner can normally be reached on Monday-Friday, from 9:00 a.m. - 5:30 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Callie Shosho can be reached on 571-272-1123. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Thao T. Tran/
Primary Examiner, Art Unit 1794